#### IN THE UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF GEORGIA ATLANTA DIVISION

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MEDALLIA INC.,	
Plaintiff, v.	CIVIL ACTION NO: 1:23-cv-03730-TCB
ECHOSPAN, INC.,	
Defendants.	

DEFENDANT ECHOSPAN, INC.'S
RESPONSIVE CLAIM CONSTRUCTION BRIEF

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#### I. INTRODUCTION

Plaintiff asks this Court to do what it should have done during prosecution of its patent application (and long before filing this suit): to fix Plaintiff's glaring errors and to provide structure for Plaintiff's deficiently functional claims where none exists. Plaintiff's proposed constructions are an attempt to prop up and broaden its invalid claims to encompass nearly every method of performing sentiment analysis. This Court should reject these efforts and adopt the constructions proposed by EchoSpan.

#### II. ARGUMENT

Plaintiff's approach to claim construction lacks the rigorous analysis expected for a matter this important and complex. For instance, Plaintiff apparently did not read the entirety of EchoSpan's disclosures, mistakenly concluding that EchoSpan did not timely disclose its indefiniteness positions. (Dkt. 65, n.2). Yet, EchoSpan's invalidity contentions plainly state "as discussed in EchoSpan's Response to Infringement Contentions, each Asserted Claim is invalid under at least 35 U.S.C. § 112 for failing to satisfy the definiteness and/or the enablement requirement." (Ex. 1-1, p. 14). The incorporated Response to Infringement Contentions also details EchoSpan's Section 112 contentions. (Ex. 1-2, e.g., p. 6 ("as demonstrated below, each asserted claim is invalid under at least 35 U.S.C. § 112(f) as failing to satisfy the definiteness requirement."), pp. 8-10 (setting forth a lengthy narrative detailing why the "model" terms are subject to Section 112(f) and indefinite). Plaintiff simply

failed to peruse EchoSpan's contentions.

Plaintiff's analysis of the disputed claim terms similarly fails to account for the full record, including the plain language of the claims and the intrinsic and extrinsic record. The Court should adopt EchoSpan's proposals, which honor the claim language, the intrinsic and extrinsic record, and the governing law. <sup>1</sup>

#### A. "first model" and "relevantly similar analysis model"

Plaintiff conflates the two "model" terms in an attempt to oversimplify their very different claimed functions and the different unrecited structures required to implement those functions (structures which are not found in the claims or the specification). But the "model" terms do share some similarities—namely, both "first model" and "relevantly similar analysis model" fail to recite the structure needed to perform the claimed functions and thus are subject to Section 112(f).

<sup>&</sup>lt;sup>1</sup> Plaintiff's suggestion that the Court should blindly adopt Plaintiff's proposed constructions for terms that EchoSpan believes are indefinite and rule on indefiniteness later is nonsensical. (Dkt. 65, n.4). Contrary to Plaintiff's assertion, EchoSpan has proposed a construction for each term - Plaintiff simply does not agree with EchoSpan that the terms, in their plain and ordinary meanings, are subject to Section 112(f). And, applicability of Section 112(f) and the resulting identification of the function and structure, are matters of claim construction to be resolved now. Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 296 F.3d 1106, 1113 (Fed. Cir. 2002). Further, to the extent the Court determines that the terms are not subject to Section 112(f), the proper course of action is not to simply default to Plaintiff's improper constructions. Rather, claim terms should be given their plain and ordinary meaning, absent (i) clear intent by the patentee (in the specification or during prosecution) to disavow that meaning, or (ii) explicit recitation of the patentee's own definition in the specification. Unwired Planet, LLC v. Apple Inc., 829 F.3d 1353, 1358 (Fed Cir. 2016). As discussed herein, nothing justifies adoption of Plaintiff's constructions over the plain and ordinary meaning.

Trying to avoid means-plus-function treatment, Plaintiff's proposed construction of "first model" relies on unrelated extrinsic sources to redefine the terms of its patent, arriving at the confusing redefinition of a "universal machine learning classifier." Of course, Plaintiff's proposed construction for "first model" is just as problematic, as it still fails to provide structure. Perhaps even more confusing is Plaintiff's proposed construction of "relevantly similar analysis machine learning classifier," which is not a known structure and appears nowhere in the literature.

# 1. "First model" and "relevantly similar analysis model" do not connote specific structure, as shown by Plaintiff's analysis.

Importantly, whether Section 112(f) applies rests on whether the *claim term itself* imparts structure. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed Cir. 2015). Additionally, the claim term must do more than connote some structure; it must instead have "a sufficiently definite meaning as the name for structure" for accomplishing the claimed functions. *Id.; Egenera, Inc. v. Cisco, Sys., Inc.*, 972 F.3d 1367, 1373-74 (Fed. Cir. 2020)(challenger need not show the limitation is "devoid of anything that can be construed as structure" but rather "need only show that the structure is not "sufficient."). (Dkt. 64, pp. 6-9, 15-16). Tellingly, Plaintiff fails to argue that "first model" and "relevantly similar analysis model" themselves connote sufficient structure. (Dkt. 65, pp. 9-18). And, any attempt to do so would be futile, as "model" is plainly a generic term and nothing in the claims requires or indicates any particular structure for accomplishing the functions of the claimed "models." (Dkt. 64, pp. 6-9, 15-16).

Rather than attempting to explain how "first model," or "relevantly similar analysis model" are understood as names for specific structures or sets of structures (as required to avoid Section 112(f)), Plaintiff immediately resorts to the specification's descriptions of the functions of certain embodiments of "models." (Dkt. 65, pp. 10-13). Plaintiff's reliance on the specification shows that the "model" terms impart no structure and (at best) are defined solely by their function, making them precisely the types of terms that are subject to means-plus-function treatment. Williamson, 792 F.3d at 1348-51. And, even if the specification disclosed some structure, which it does not, "a preferred embodiment disclosed in the specification cannot impart structure to a term that otherwise has none." MTD Prods. Inc. v. Iancu, 933 F.3d 1336, 1343 (Fed. Cir. 2019); Team Worldwide Corp. v. Intex Recreation Corp., No. 2020-1975, 2021 WL 4130634, at \*6 (Fed. Cir. Sept. 9, 2021) ("any structure arguably disclosed in the specification via an embodiment cannot support a finding that the claim term itself connotes specific structure").

Indeed, even assuming the models are computer models, the claims do not specify that the "models" are implemented through specific software, hardware, or a combination, let alone recite the kind of definite structure for performing the functions necessary to avoid means-plus-function treatment. *Williamson*, 792 F.3d at 1350 (term that is a "generic description for software or hardware that performs a specified function" is a means-plus-function term); *Cellwitch Inc. v. Tile, Inc.*, Case No. 19-cv-01315-JSW, 2024 WL 1772835, at \*12-13 (N.D. Cal. April 23,

2024)("learning module" was a means-plus-function term where claim language and specification did not provide any structure for the "learning module" beyond a generic description of software or hardware that performs a specified function).

Nor does Plaintiff argue that the additional claim language modifying or surrounding the word "model" in the "model" terms imparts any particular structure. Rather, Plaintiff lumps the two "model" terms together, perhaps hoping that no one scratches the surface of its unsupported assertions that these terms connote the structure required to perform their respective claimed functions. (Dkt. 65, pp. 9-18). But a closer look at the claims for the "first model" and "relevantly similar analysis model" terms reveals that the language surrounding those terms fails to impart any structure.

For the "first model," the additional word "first" does not impart any structure. Plaintiff's construction of that term would even improperly read out the word "first" altogether, indicating Plaintiff's apparent belief that it is irrelevant to the claimed model. Nor do the recited functions ("evaluating a text input" and "determining an initial sentiment and confidence thereof") indicate any particular structure. Here, "the terms surrounding and modifying ['model'] are purely functional and do not connote any structure, much less, a 'sufficiently definite' structure, as required by *Williamson* and *Dyfan*." *WSOU Invs. LLC v. Google LLC*, No. 2022-1066, 2023 WL 6210607 at \*4 (Fed. Cir. Sept. 25, 2023).

The same is true of the "relevantly similar analysis model" - there is no

evidence, nor has Plaintiff offered any, that this term was well-known as a name for structure for accomplishing the claimed functions. Adv. Ground Info. Sys. v. Life 360, Inc., 830 F.3d 1341, 1348 (Fed. Cir. 2016) ("symbol generator" subject to Section 112, para. 6 because the term was coined by the patentee and not used by persons of skill in the art to designate structure). Rather, the evidence shows that "relevantly similar analysis model" is not even used in the art, much less as a name for a specific structure capable of performing the claimed functions. (Dkt. 64, pp. 6-9, 15-16; Ex. 1-9). The specification provides no structure for how to accomplish the "relevantly similar analysis," and again provides no explanation of what types of models are used, how the model is trained, the type and form of data used in training, or the type and form of output expected from the model. And, Plaintiff does not even attempt to explain how the undefined "structure" allegedly imparted by "relevantly similar analysis model" differs from that of the "first model," even though these two models must accomplish very different functions. (Dkt. 65, pp. 9-18).

The case relied upon by Plaintiff in its attempt to avoid means-plus-function treatment of the "model" terms was decided under a much different set of facts than those present here. In *Dyfan*, the accused infringer's own expert admitted that the "code configured to" term itself connoted structure and the functions claimed could be accomplished with known, off-the-shelf software. *Dyfan*, *LLC v. Target Corp.*, 28 F.4th 1360, 1367-68 (Fed. Cir. 2022). The Federal Circuit relied heavily on the accused infringer's *own* admissions that, in the context of that specific patent and its

claims, the disputed term was one that a skilled artisan "would have understood as a particular structure" for accomplishing the function. *Id.* In fact, the accused infringer's expert in *Dyfan* went so far as to admit that the term would have been commonly understood to refer to a specific computer program which developers at the time could have selected from existing off-the-shelf software to perform the claimed functions. *Id.* There is no such evidence here regarding either "model" term and the intrinsic record reveals these terms connote no structure. (Dkt. 64, pp. 6-9, 15-16). Indeed, Plaintiff itself claims the "model[s] disclosed in the patent are specialized and offer coarse and fine-tuned analysis," realizing purported "improvements in model training time, speed, and accuracy" – thus, under Plaintiff's reading, these "specialized" patented models with their claimed improvements are not meant to refer to "off-the-shelf" structures. (Dkt 65, p. 12).

Because Plaintiff does not even attempt to explain how the "model" terms impart structure, let alone structure sufficient to perform the claimed functions, the "model" terms here impart even less structure than the "logic to modify" terms found to be means-plus-function terms in *Egenera*. There, the patentee (who opposed Section 112 ¶ 6 treatment of the term "logic to modify") did "not explain how its 'logic' – even assuming it connotes some possible structure in the general sense of software, firmware, or circuitry – amounts to *sufficient* structure for performing the modification function." *Egenera*, 972 F.3d at 1374 (emphasis in original); *XR Commc'ns*, *LLC v. ARRIS Sols., Inc.*, No 2022-1125, 2023 WL 3529830, at \*2 (Fed.

Cir. May 18, 2023)("search receiver logic" subject to Section 112(f), noting "the question is not whether [term] is utterly devoid of structure but whether the claim term recites sufficient structure to perform the claimed functions").

Because the "model" terms do not impart any structure, Plaintiff resorts to uncompelling arguments that its litigation-driven redefinitions of the "models" as "machine learning classifiers" impart some structure. As discussed below, even these newly created terms fail to impart the structure needed to avoid Section 112(f).

# 2. Plaintiff's invocation of "machine learning" is improper and fails to impart structure.

Perhaps recognizing that the '639 patent provides no support for the idea that "first model" and "relevantly similar analysis model" are well-known structures for accomplishing the claimed functions, Plaintiff attempts to rescue the claims by importing the idea of a "machine learning model" into the claims. But the claims here do not specify how the models operate, let alone require that the models be "machine learning models." (Dkt. 1-1). Indeed, the specification mentions "machine learning," only once, as an optional implementation: "[m]achine learning techniques can be used on the feedback to determine useful properties of the feedback, e.g. its sentiment." (Dkt. 1-1, 1:29-31) (emphasis added). Reading in the requirement that the models are "machine learning" models is wholly improper. *Epos Tech. Ltd. v. Pegasus Tech. Ltd.*, 766 F.3d 1338, 1341 (Fed. Cir. 2014)(limitations of embodiments should not be imported into the claims, "absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited"). Plaintiff's

desire to rewrite the claims before engaging in Section 112 analysis can only be a misplaced attempt to avoid Section 112(f). This attempt should be rejected for several reasons.

Because the term "machine learning model" does not even appear in the '639 patent, Plaintiff must rely exclusively on extrinsic evidence in its attempt to find structure. Yet this, too, fails to support that a "machine learning model" imparts any specific structure. Plaintiff apparently does not appreciate the key distinction between its oft-repeated claim that "machine learning model" has a "wellestablished meaning in the art," (Dkt. 65, e.g., p. 13, p. 14) and Section 112(f)'s requirement that the term have a "sufficiently definite meaning as the name for structure" for accomplishing the claimed functions. Williamson, 792 F.3d at 1350. That a term can be "understood" does not mean it is the name for a particular structure for accomplishing the claimed function, as required to avoid Section 112(f) treatment. See Team Worldwide, 2021 WL 4130634, at \*6 ("evidence that a skilled artisan would have known that devices existed that can perform the functions of the [disputed term] is not the relevant inquiry"); Diebold Nixdorf, Inc. v. Int'l Trade Comm'n, 899 F.3d 1291, 1298-302 (Fed. Cir. 2018). Plaintiff's argument that a skilled artisan would understand the disputed term to be "any structure capable of performing the claimed function" is insufficient to escape Section 112(f) and should be rejected. Id.; see also Cellwitch, 2024 WL 1772835, at \*12 (district court distinguished the unique circumstances of Dyfan from cases where, as here, the intrinsic evidence demonstrated that the term did not recite sufficiently definite structure, despite patentee's claim (and even expert testimony) that the extrinsic evidence provided sufficient connotation of structure).

Because Plaintiff fails to grasp the key requirement that the term must itself connote a specific structure for accomplishing the claimed functions, its reliance on extrinsic evidence to show that "machine learning model" has "meaning," only further underscores that "machine learning model" is also a nonce term which does not connote any specific structure. Plaintiff first relies on the National AI Initiative Act of 2020, which defines "machine learning" for purposes of that statute. (Dkt. 65, p. 13). As a threshold matter, the notion that a Congressional definition for "machine learning" is a proper reference for the meanings of *completely different* technical terms ("first model" and "relevantly similar analysis model") in the context of a particular patent, let alone proof that those different terms have a "notoriously well-known meaning," (*id.*), connoting specific structure, is preposterous.

Further, this definition imparts no structure. Instead, it encompasses *any* "application of artificial intelligence that is characterized by providing systems the ability to automatically learn and improve on the basis of data or experience, without being explicitly programmed." (Dkt. 65, Ex. C). This contemplates that a machine learning system can be structured in any number of undisclosed ways that "provid[e]" "the ability to automatically learn and improve on the basis of data or experience." (*Id.*). Further, the Congressional intent behind this statute was to

promote AI research and development (Ex. 1-4 at 4), not to provide accurate and detailed technical definitions. What's more, even if government initiatives on artificial intelligence were reliable technical sources, which they are not, those that include a definition of "AI model," support that "model" is a nonce word generically referring to a "component" for accomplishing a given function and imparting no particular structure. (Ex. 1-5) ("AI model" defined as "a component of an information system that implements AI technology and uses computational, statistical, or machine-learning techniques to produce outputs from a given set of inputs").

Next, Plaintiff relies vaguely on twelve references cited during prosecution that purportedly "discuss machine learning techniques and models," as well as another reference that allegedly "provides an overview of various ML models known in the art at that time." (Dkt. 65, pp. 13-14). Plaintiff provides a non-exhaustive list of exemplary machine learning techniques:

Naïve Bayes (NB), Recursive Neural Network, (RecNN), Convolutional Neutral Network (CNN), Long Short-Term Memory (LSTM), Weakly-supervised Deep Embedding (WDE), individual training mechanisms, and others.

(*Id.*, p. 14). Plaintiff goes on to invoke "[v]arious other references [that] discuss the use of NB, ReCNN, CNN, LSTM and other ML Models in different settings," claiming that these "designat[e] specific structures designed to learn text associations using streams of input data, without being explicitly programmed." (*Id.*). None of these terms are recited in the specification, nor are they cited as an

example of a "first model." Plaintiff does not explain how these references show that "first model," and "relevantly similar analysis model," or its redefined "machine learning" models are names for any meaningful structure, let alone sufficiently definite structures to accomplish the claimed functions. (*Id.*). Rather, Plaintiff's position only highlights that the "model" terms are an improper attempt to achieve a "monopoly on every conceivable way" of accomplishing the claimed function. *MyMedicalRecords, Inc. v. Walgreen Co.*, No 2:13-cv-00631, 2014 WL 4367949, at \*5 (C.D. Cal. Sept. 3, 2014).

Despite its incredibly broad claim that "in the context of machine learning, the term 'model' has a very well understood meaning as a specific type of computer software, such as NB, RecNN, CNN, LSTM, and other ML, after it has been trained on data," Plaintiff fails to point to a definite structure known as a "first model" or "relevantly similar analysis model" for performing the claimed functions. (Dkt 65, pp. 16-17). Rather, Plaintiff points to every possible way of programming and training a computer that might ultimately result in a system that *could* perform the claimed functions, again without even distinguishing between the two terms. (*Id.*, pp. 9-18). This is woefully deficient. *Egenera*, 972 F.3d at 1374 ("logic" terms connoted insufficient structure where logic meant a "general category of whatever may perform the function"); *Diebold*, 899 F.3d at 1298-302.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Nor is Plaintiff's reliance on *Apple* appropriate. (Dkt. 65, p. 17). First, *Apple* was decided under the heightened standard for Section 112(f), expressly rejected en banc in *Williamson*, 792 F.3d at 1349. *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1300

That "machine learning model" is not a term for structure is further shown by Plaintiff's various formulations of that term, which connote no structure (e.g., no particular algorithm) and purport to cover the entire spectrum of systems which could perform the claimed functions:

- "specific structures designed to learn text associations using streams of input data, without being explicitly programmed" (Dkt. 65, p. 14);
- "a specific type of computer software, such as NB, RecNN, CNN, LSTM and other ML, after it has been trained on data" (*id.*, pp. 16-17);
- "the learned representation of the patterns in the training data, which can then be used to make predictions or decisions when new data is inputted." (*Id.*, p. 17).

Consideration of more appropriate definitions of "machine learning," found in technical references, reveals why Plaintiff omitted those definitions. These definitions explicitly underscore that a "machine learning model" does not refer to an off-the-shelf, one size fits all "structure," and certainly not one for performing the precise claimed functions of the two "model" terms. Machine learning models can be implemented in a variety of ways, including via specific algorithms that enable a

<sup>(</sup>Fed. Cir. 2014). And, while a claim term may denote a "class of structures," instead of a single structure, the claim term itself must nevertheless be a known term for referring to that class of structures for performing the claimed function, to avoid means-plus-function treatment. *Diebold*, 899 F.3d at 1298-302. This simply is not the case here – the "model" terms do not refer to any known class of structures.

system to learn and adjust based on data inputs. (Ex. 1-6). These algorithms must be specifically programmed and tailored based on a variety of factors, including the specific category of machine learning to be employed, the work to be performed by the system, the training data, the form of the inputs and outputs, and many other factors. (*Id.*).

#### 3. Plaintiff's miscellaneous "model" arguments are unavailing.

Plaintiff also makes a few disjointed and confusing arguments in its kitchen sink attempt to avoid application of Section 112(f). First, Plaintiff claims that, because the examiner never objected to the use of the "model" terms, the examiner's was "aware of the[] meaning" of those terms. (Dkt. 65, p. 13). But this does not negate that the "model" terms are nonce terms subject to Section 112's functional claiming requirements - again, even well-understood terms such as module, mechanism, element, unit, device, and so forth are nevertheless subject to Section 112(f) where the patentee engages in functional claiming as Plaintiff did here. See Williamson, 792 F.3d at 1350. (Dkt. 64, pp. 6-9, 15-16). And, the Federal Circuit has explicitly rejected the notion that an examiner's silence during prosecution with respect to the applicability of Section 112(f) is entitled to any weight in the analysis. Team Worldwide, 2021 WL 4130634, n.8, \*6 (rejecting argument that examiner's ability to recognize that a component in the prior art may perform some of the functions of the disputed term is evidence that the term itself connotes structure).

Even more confusingly, Plaintiff claims (with no authority or even

explanation) that the "model" terms cannot be means-plus-function terms because those terms are "*nouns*." (Dkt. 65, pp. 15-16 (emphasis original)). But "means," too, is a noun (Ex. 1-3), as are other nonce words subject to means-plus-function claiming in computer-implemented inventions, such as module, unit, device, mechanism, and so forth. *See Williamson*, 792 F.3d at 1350; *Rain Computing, Inc. v. Samsung Elecs. Am., Inc.*, 989 F.3d 1002, 1006-08 (Fed. Cir. 2021). (Dkt. 64, pp. 6-9). The very construct of a means-plus-function claim is a "[noun] for [accomplishing the claimed function]" – here, the "model" terms follow this same construct, a model for accomplishing the recited functions. (Dkt. 64, pp. 6-9, 15-16).

To the extent Plaintiff is arguing that the "model" terms are not means-plusfunction terms simply because the parties' list of proposed terms did not explicitly
list the entire claimed function, this is not true. Nothing prevents the Court from
considering and determining at this stage whether the terms are subject to Section
112(f). Indeed, the Court must "fully resolve[]" all claim construction disputes so
that no questions of claim scope are left to the jury. Every Penny Counts, Inc. v. Am.
Express Co., 563 F.3d 1378, 1383 (Fed. Cir. 2009); O2 Micro Int'l Ltd. v. Beyond
Innovation Tech. Co., Ltd., 521 F.3d 1351, 1360-61 (Fed. Cir. 2008); Eon Corp. IP
Holdings v. Silver Spring Networks, 815 F.3d 1314, 1319 (Fed. Cir. 2016) (failure to
resolve claim construction disputes prior to trial constitutes legal error).

# 4. Plaintiff's addition of "classifier" is unjustified and confusing. Plaintiff's attempt to completely replace "first model" with a "universal

machine learning classifier" should be rejected. The term "universal machine learning classifier" appears nowhere in the claims or specification and was made up in an improper attempt to change the scope of the claims. Plaintiff argues only that "Medallia's construction of these terms is derived directly from the discussion of the two machine learning models in the specification," (Dkt. 65, p. 14), yet this reasoning suffers from major factual and legal flaws. First, the word "classifier" does not appear a single time in the '639 patent and Plaintiff does not define what it means by "classifier." (Dkt. 1-1; Dkt. 65, pp. 14-15). Plaintiff simply states that "[e]very example of sentiment model use[sic] in the '639 patent refers to classification." (Dkt. 65, n.3). But, even assuming these terms could be derived from embodiments in the specification, it is a basic claim construction principle that limitations of embodiments should not be imported into the claims, "absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited." *Epos* Tech., 766 F.3d at 1341. Plaintiff acknowledges this principle (Dkt. 65, p. 19), but fails to apply it to the "model" terms. And, the '639 patent explains its "various embodiments are illustrative only and are not intended to be limiting in any way. Other embodiments will readily suggest themselves to such skilled persons having the benefit of this disclosure." (Dkt. 1-1, 2:67-3:4). Thus, Plaintiff's redefinition of "models" to "classifiers" should be rejected.

Plaintiff provides no explanation for why the word "model" should be replaced with the undefined "classifier," except that "colloquial use of the word

'model," like "model car" and "fashion model," might confuse the jury. (Dkt. 65, pp. 14-15). This vague and unsupported possibility that the jury might confuse the claimed "models" with a model car or a fashion model does not justify redefining the scope of the claims. *Unwired Planet*, 829 F.3d at 1358 (plain and ordinary meaning applies absent clear patentee intent otherwise). In fact, perhaps recognizing the weakness of its argument, Plaintiff also states it "would not object if the Court were to choose the term 'model' for its constructions." (Dkt. 65, n.3).

If one were to replace the phrase "first model," with "universal machine learning classifier," this would introduce additional ambiguity into the claims. There is no clear definition for the proposed "classifier," nor does Plaintiff even attempt to offer one. (Dkt. 65, pp. 14-15). Rather than avoiding jury confusion, as Plaintiff suggests (*id.*, p. 15), this phrase would only create more confusion. *Promptu Sys. Corp. v. Comcast Corp.*, 92 F.4th 1372, 1381 (Fed. Cir. 2024) ("[i]mportantly, a claim construction, if needed at all, should help resolve, not add to, uncertainty in the understanding the finder of fact is to use in applying a claim term").

Further, the word "classifier" is itself another nonce term – a word that derives its very name from the function it is to perform: "classification." The term "universal machine learning classifier," appears to have been ginned up by Plaintiff's counsel in a post hac attempt to impart structure where none exists. But that term is not an accepted term of art, let alone one connoting specific structure for performing the claimed functions of "evaluating text input" to "determine an initial sentiment and

confidence thereof." Plaintiff does not point to a single structure called a "universal machine learning classifier," let alone a structure by this name known for determining an initial sentiment and a "confidence thereof." Indeed, the only reference to the phrase "universal machine learning classifier" that EchoSpan could locate (an abstract for a paper published in 2019 by the Nanyang Technological University), undermines Plaintiff's claim that this term has any accepted meaning, let alone a defined structure known to those in the art. (Dkt. 64, pp. 8-9).

The same is true of Plaintiff's construction of a "relevantly similar machine learning classifier." Again, Plaintiff's one size fits all construction of the "model" terms as "machine learning classifiers" is nonsensical. The functions of the "relevantly similar analysis model" are not to generically "classify," but rather to evaluate text inputs in order to "generate a relevantly similar confidence (RSC) score," and "determine[] whether to use the initial sentiment." (Dkt. 1-1). The specification does not provide clarity on how this is accomplished. (*Id.*). Plaintiff points to no evidence that its made up "relevantly similar analysis machine learning classifier" is a well-known name for structure for accomplishing these functions.

# 5. Plaintiff has not identified any structure in the specification, should the "model" terms be subject to Section 112(f).

At no point does Plaintiff point to any structure in the specification to accomplish the functions of the "model" terms, nor is there any such structure in the '639 patent. (Dkt. 64, pp. 10-15, 17-18). The specification itself acknowledges that the details required to implement the invention are not disclosed and that

development of the claimed invention "might be complex and time consuming":

In addition, for clarity purposes, not all of the routine features of the embodiments described herein are shown or described. One of ordinary skill in the art would readily appreciate that in the development of any such actual embodiment, numerous embodiment-specific decisions may be required to achieve specific design objectives. These design objectives will vary from one embodiment to another and from one developer to another. Moreover, it will be appreciated that such a development effort might be complex and time-consuming but would nevertheless be a routine engineering undertaking for those of ordinary skill in the art having the benefit of this disclosure.

(Dkt. 1-1, 3:5-16). But this type of "bring your own structure" disclosure does not meet the requirements of Section 112(f) for disclosing sufficiently definite structures. *Synchronoss Techs. v. Dropbox, Inc.*, 987 F.3d 1358, 1367-68 (Fed. Cir. 2021)); *WSOU Invs.*, 2023 WL 6210607, at \*6 (knowledge of a skilled artisan cannot serve as a "gap-filler," where the specification fails to disclose adequate structure.). This is because "the indefiniteness inquiry is concerned with whether the bounds of the invention are sufficiently demarcated, not whether one of ordinary skill in the art may find a way to practice the invention." *WSOU Invs.*, 2023 WL 6210607, \*6 (citing *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 519 (Fed. Cir. 2012)).

#### B. "a list including at least one secondary sentiment"

That Plaintiff is attempting to use the guise of plain and ordinary meaning to avoid resolution of the parties' dispute regarding this term is evident in its Opening Claim Construction Brief. Plaintiff claims only that the jury will understand that the claimed "secondary sentiment' simply contrasts with the term 'initial sentiment,"

yet refuses to explain its view on the purported "plain and ordinary meaning," of these terms or how this "contrast[]" could mean something other than EchoSpan's proposal that the claimed sentiments are different from each other.

It is black letter law that one must not improperly read in limitations from the specification. But, as Plaintiff acknowledges, limiting claim scope is proper where there is "clear indication in the intrinsic record that the patentee intended the claims to be so limited." (Dkt 65, p. 19)(quoting *Epos Tech.*, 766 F.3d at 1341). The intrinsic record here shows patentee intended that "a list including at least one secondary sentiment," is distinct from the "initial sentiment," that is, the listed secondary sentiments are *not the same* as the initial sentiment. For instance, while responding to a rejection during prosecution, the applicant represented to the USPTO that its claims were distinct from prior art based on this limitation, explaining that the Shilman prior art reference "fails to teach or suggest" the element of "accessing a list including at least one secondary sentiment," because "Shilman does not make a selection between sentiments (original one and the one determined after the match is found and conflict is resolved)," i.e., a selection between two different sentiments. (Ex. 1-7, p. 8). Relying on these statements, the examiner next issued a notice of allowance, noting that none of the prior references, including Shilman, taught "accessing a list including at least one secondary sentiment." (Ex. 1-8, Detailed Action, p. 3). Thus, the prosecution history reflects the patentee's intent to limit the claims, as does the claim language and specification. (Dkt. 64, pp. 18-20).

EchoSpan's proposal resolves the parties' dispute in a way that is not only consistent with the plain language of the claims and the specification, but also reflects the patentee's intent during prosecution. EchoSpan's proposal honors the intrinsic record, while Plaintiff's proposal improperly punts the claim construction dispute to the jury, who Plaintiff claims, "will readily appreciate that the reference to the 'secondary sentiment' simply contrasts with the term 'initial sentiment' used earlier in the claim." (Dkt. 65, p. 18). Plaintiff fails to explain how these terms "contrast[]," yet are not different. (*Id.*). Leaving this dispute for the jury to resolve, as Plaintiff proposes, would be legal error. *Eon Corp.*, 815 F.3d at 1319.<sup>3</sup>

#### C. "relevantly similar confidence (RSC) score"

Plaintiff's "plain and ordinary" meaning proposal is actually not "plain and ordinary meaning" at all. Rather, Plaintiff admits the term is not known, but rather "a term coined in the patent disclosure." (Dkt. 65, p. 20). But the '639 patent does not define this patentee-coined phrase. *Sumitomo Dainippon Pharma Co. v. Emcure Pharms. Ltd.*, 887 F.3d 1153, 1159 (Fed. Cir. 2018) ("[t]o act as a lexicographer, the patentee must clearly set forth a definition of the disputed claim term" in the intrinsic record). To fill the gaps in the intrinsic record, Plaintiff makes up its own litigation-driven definition: "a numerical value indicating the level of confidence a machine learning RSA classifier has that a sentiment of an input text is relevantly similar to

<sup>&</sup>lt;sup>3</sup> Plaintiff objects to the plural "sentiments" in EchoSpan's construction. EchoSpan is amenable to the construction, "a list of one or more client-generated sentiments different than the initial sentiment," which resolves this objection.

a sentiment used to train the RSA classifier." (Dkt. 65, p. 20). Plaintiff's definition has no basis in the specification, which never defines or explains a "confidence score," let alone a "relevantly similar confidence (RSC) score." (Dkt. 1-1). Nowhere in the patent is it explained *how* the relevantly similar score is generated, what format it is in, or what is meant by the vague phrase "relevantly similar." (*Id.*). One of skill in the art is told nothing about this patentee-created "relevantly similar confidence (RSC) score," nor how to calculate it. Plaintiff's attempt to impart some meaning via the specification only highlights that the term is not defined with certainty. And, even if some possible meanings could be derived from various embodiments, the specification does not provide a "reasonably clear and exclusive definition," and thus this term is indefinite. *See Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1372-75 (Fed. Cir. 2014).

#### D. "greater than to"

As an initial matter, Plaintiff should have sought correction of this typographical error via petition to the USPTO before attempting to enforce its patent rights against EchoSpan. Having neglected to correct this term, Plaintiff now asks the Court to rewrite its claims and impart meaning to this otherwise indiscernible phrase. However, in doing so, Plaintiff ignores that that the term "greater than to" has many possible, and reasonable, interpretations – which renders construction impossible. As such, this term is plainly indefinite.

Plaintiff attempts to sidestep these issues by incorrectly attempting to limit the

possible universe of intended meanings to two variations – "greater than **the**" or "greater than **a**". (Dkt. 65, p. 21). However, this attempt ignores the numerous other possible interpretations and "reasonable debate" that follows, as EchoSpan notes in its opening brief. (Dkt. 64, pp. 22-23); *Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1354 (Fed. Cir. 2003).

Relying on *Ultimax*, Plaintiff asserts that the typographical error should be corrected by the Court. (Dkt. 65, p. 21-22) (*citing Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1353 (Fed. Cir. 2009)). However, the circumstances in *Ultimax* are significantly different from the current case. In *Ultimax*, the Federal Circuit corrected "a possible drafting error in the . . . patent [at issue], namely, that there should be a comma..." and, as Plaintiff admits, the court determined that in that case "the correction [was] not subject to reasonable debate to one of ordinary skill in the art." (Dkt. 65, p. 22). 587 F.3d at 1353. Conversely, the facts here are diametrically opposed to those in *Ultimax*. Here, there is no obvious typographical error with only one possible correction – instead, there is substantial ambiguity over what the patentee intended.

For at least these reasons, and as otherwise presented in EchoSpan's opening brief, the Court should determine that the term "greater than to" is indefinite.

## E. "retrieving a plurality of text strings determined to be similar to the text seed from a database"

As Plaintiff admits, the intrinsic evidence related to this term "largely follow[s] the language of the claim and shed[s] no further light," on the term's

meaning. (Dkt. 65, p. 23). And, the language of the claim does not define the claim scope with any certainty. As explained in EchoSpan's opening brief, the patent fails to explain how the initial similarity determination is made, including who or what is performing that step. (Dkt. 64, p. 24). Plaintiff agrees, noting that "the recited claim limitation is a step in a method claim which does not require a particular actor to perform any specific step." (Dkt. 65, p. 23). Thus, because a skilled artisan is unable to ascertain the scope with any reasonable certainty, the term is indefinite.

#### F. "second order sentiment results" / "first order sentiment results"

Plaintiff's proposal for "first order sentiment results" and "second order sentiment results" suffer from major infirmities. First, Plaintiff's proposals completely read out the explicit requirement in the claim language that the results be "first order" and "second order," running afoul of a fundamental tenet of claim construction that every word in a patent claim should be given meaning. *Akzo Nobel Coatings, Inc. v. Dow Chem. Co.*, 811 F.3d 1334, 1340 (Fed. Cir. 2016) ("A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so."). Proposed constructions that fail to do so should be rejected. *Id.* ("[i]nterpretations that render some portion of the claim language superfluous are disfavored."). Second, Plaintiff's constructions incorporate its flawed constructions for the "model" terms, which are confusing and fail to account for the Section 112(f) form in which those terms are written. (Section II.A; Dkt. 64, pp. 6-9, 15-16).

Instead, the "first order sentiment results," and "second order sentiment

results," terms are indefinite because a skilled artisan would not understand their scope with reasonable certainty. As Plaintiff acknowledges, the "first order sentiment results" and "second order sentiment results" are described generically as outputs from the first model and relevantly similar analysis model. (Dkt. 65, pp. 23-24). Because the models are undefined, a skilled artisan would have no understanding of the model outputs, nor does the '639 patent explain these outputs with any certainty.

#### III. CONCLUSION

For the foregoing reasons and those set forth in EchoSpan's Opening Claim Construction Brief, EchoSpan respectfully requests that the Court adopt its proposed constructions for the terms.

#### Respectfully submitted this 20th day of June, 2024.

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#### **CERTIFICATE OF COMPLIANCE**

Pursuant to LR 5.1(C), the undersigned counsel hereby certifies that the foregoing document has been prepared in Times New Roman 14-point, one of the font and point selections approved by the Court.

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#### IN THE UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF GEORGIA ATLANTA DIVISION

MEDALLIA INC.,	
Plaintiff,	CIVIL ACTION NO: 1:23-cv-03730-TCB
v. ECHOSPAN, INC.,	

Defendants.

#### **CERTIFICATE OF SERVICE**

I hereby certify that on June 20, 2024, a true and correct copy of the foregoing document was filed electronically through the Court's CM/ECF system with notice of case activity automatically generated and sent electronically to all counsel of record.

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